

MACKENZIE.

DESIGN DRIVEN | CLIENT FOCUSED

March 19, 2019

Intel Corporation
Attention: Kristine Baranski
2501 NE Century Boulevard
Hillsboro, OR 97124

Re: **Inter Ronler Acres – MPTF-1 and D1X Mod3**
DEQ Traffic Volume Forecast Methodology
Project Number 2180548.00

Dear Ms. Baranski:

Mackenzie has prepared this letter to explain the methodology for deriving the 2024 peak hour link volume forecasts. The study area includes 35 roadway segments, numbered 101 through 135 in the attached figure.

The Transportation Impact Analysis (TIA) dated March 14, 2019 prepared forecasts for 19 intersections for an opening year of 2022. These forecasts were used to estimate the peak hour volumes on Links 101 through 119, which are adjacent to the TIA intersections. To extend the TIA forecast from year 2022 to year 2024, two additional years of background traffic growth at an annual rate of 2% per year was added to the TIA volumes.

For links not adjacent to the TIA intersections, a combination of agency traffic counts and historical intersection turning movement volumes were used to prepare forecasts. The sources and methodology used for these links is described below.

- **Cornelius Pass Road (Links 122, 124, 126, 129, and 130):** Washington County collects annual counts of daily volumes on Cornelius Pass Road north of Imbrie Drive and north of Cornell Road. Historical turning movement volumes were also available at some intersections for 2012 and 2015. Annual growth rates were derived from the turning movement data and found to be in line with annual rates derived from the County's daily volumes. Therefore, the annual growth rate for the intersections was applied to the historical peak hour volumes to estimate 2018 existing link volumes, the same year as the TIA existing condition. The TIA background growth rate of 2% per year for six years was applied to the existing volumes, and then the additional Intel traffic anticipated for the proposed scenario was added to estimate the 2024 volumes.
- **Evergreen Road (Links 120 and 123) and Cornell Road (Links 127, 131, and 133):** Washington County collects annual counts of daily volumes on Evergreen Road east and west of Cornelius Pass Road, and Cornell Road east of Cornelius Pass Road. Annual daily traffic (ADT) volumes from 2012 through 2017 were used to derive annual growth rates. These rates were applied to historical peak hour volumes collected in 2012 to estimate 2018 existing link volumes, the same year as the TIA existing condition. The TIA background growth rate of 2% per year for six years was applied to the existing volumes, and then the additional Intel traffic anticipated for the proposed scenario was added to estimate the 2024 volumes.
- **Imbrie Drive (Link 121), Butler Street (Link 132), and Walker Road (Link 128):** The City of Hillsboro collects annual counts of daily and peak hour volumes on Imbrie Drive north of Evergreen Road, Butler Street west of Cornelius Pass Road, and Walker Road east of Cornelius Pass Road. Volumes from 2013 through 2017 were used to derive

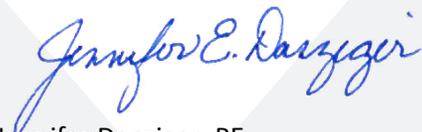


annual growth rates that were applied to historical peak hour volumes from 2012 to estimate 2018 existing link volumes. The TIA background growth rate of 2% per year for six years was applied to the existing volumes and then the additional Intel traffic anticipated for the proposed scenario was added to estimate the 2024 volumes.

- **Highway 26 (Links 134 and 135):** ODOT collects average daily traffic data on Highway 26 east and west of the Cornelius Pass Road interchange. Volumes from 2012 through 2017 were used to extrapolate a daily volume for year 2018 existing condition. Peak hour counts are not available on the highway so the 2018 AM peak hour volume was conservatively assumed to be 8% of the daily volume, and the 2018 PM peak hour was conservatively assumed to be 10% of the daily volume. The TIA background growth rate of 2% per year for six years was applied to the existing volumes and then the additional Intel traffic anticipated for the proposed scenario was added to estimate the 2024 volumes.

Please let me know if you have questions or comments on the volume estimates.

Sincerely,



Jennifer Danziger, PE
Traffic Engineer

Enclosure: Volume Figure

c: Patrick Dwyer, Stephanie Shanley – Intel Corporation
Brent Ahrend – Mackenzie



LEGEND

AM

PM

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 JOB NO:
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**2024 PEAK HOUR
 LINK VOLUMES**
**INTEL RONLER ACRES
 HILLSBORO, OREGON**

**FIGURE
 1**